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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,412	04/13/2004	Gianni Pasqualini	2031-043918	3241

7590 02/13/2007  
William H. Logsdon  
WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.  
700 Koppers Building  
436 Seventh Avenue  
Pittsburgh, PA 15219-1818

EXAMINER
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KIM, SUN U

ART UNIT	PAPER NUMBER
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1723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/823,412

Applicant(s)

PASQUALINI, GIANNI

Examiner

John Kim

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/3/05</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1723

1. Applicant's election of Group I (claims 1-14) in the reply filed on 12/20/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was treated as an election without traverse as described in above paragraph.

3. The disclosure is objected to because of the following informalities: Reference to "Claim 1" on page 3, line 8 of the specification should be deleted.

Appropriate correction is required.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Porro et al (EP 0890368 A1).

Regarding claims 1-2, Porro et al teach a blood treatment unit comprising oxygenator i.e. CO<sub>2</sub> removing means (B1) having a first inlet (160b) and a first outlet (160a) and hemoconcentrator i.e. filtering means (A1) having a first inlet (160a) and a first outlet (150a) wherein oxygenator and hemoconcentrator are integrated to form in one body (see Fig. 8-10; col. 6, lines 11-17; col. 8, line 54 – col. 9, line 39).

Art Unit: 1723

Regarding claim 3, Porro et al teach that the first outlet (160a) of oxygenator (B1) is connected to the first inlet (160a) of hemoconcentrator (A1) (see Fig. 8-9).

Regarding claim 9-10, Porro et al teach that oxygenator (B1) and the hemoconcentrator (A1) are housed in respective separate casings that are joined and fixed rigidly to each other (see Fig. 7-8).

Regarding claim 11, Porro et al teach that the hemoconcentrator (A1) project outwards from the oxygenator (B1) (see Fig. 8-9).

Regarding claim 13, Porro et al teach the oxygenator (B1) having a gas inlet i.e. 2<sup>nd</sup> inlet and gas outlet i.e. 2<sup>nd</sup> outlet (see Fig. 8-9).

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ghell et al (EP 1180374 A1).

Regarding claims 1-2, Ghell et al teach a blood treatment unit comprising oxygenation chamber i.e. CO<sub>2</sub> removing means (6) having a first inlet and a first outlet and blood filter i.e. filtering means (12, 28) having a first inlet and a first outlet wherein oxygenation chamber and blood filter are integrated to form in one body (see 1; paragraphs 0014-0016, 0021-0022).

Regarding claim 3, Ghell et al teach that the first outlet of oxygenation chamber is connected to the first inlet of blood filter (12, 28) (see Fig. 1; paragraph 0015).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1723

8. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porro et al as applied to claim 2 above, and further in view of Linker et al (US 2002/0176798 A1). Porro et al teach a blood treatment device as described in above paragraph 5. Claims 4 and 6-8 essentially differ from the device of Porro et al in reciting CO<sub>2</sub> removing means comprising an inner seat housing filtering means (claim 4), filtering means comprising a second casing housed inside the first casing and housing membranes (claim 6), membranes for removing CO<sub>2</sub> interposed between the first and second casing (claim 7) and a container interposed between the membranes for removing CO<sub>2</sub> and the second casing and internally defining the inner seat (claim 8). Linker et al teach a blood treatment device having a compact size and low surface area and reducing contact between the blood and foreign surfaces to reduce priming volume, hemolysis and platelet activation (see paragraph 0010). To achieve such compact blood treatment device, Linker et al teach a housing structure including CO<sub>2</sub> removing means (70) comprising an inner seat (see central shoulder section at the bottom of filter (59) in Fig. 3) housing filtering means, filtering means (59) comprising a second casing (see casing holding filter (59) in Fig. 3) housed inside the first casing (see outer casing in Fig. 3) and housing membranes (59), membranes (70) for removing CO<sub>2</sub> interposed between the first and second casing and a container (see central shoulder section at the bottom of filter (59) in Fig. 3) interposed between the membranes for removing CO<sub>2</sub> (70) and the second casing (see casing holding filter (59)) and internally defining the inner seat (see 0048-0053, 0055-0058). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the blood treatment device of Porro et al to include above claimed structures to integrate known blood oxygenators, blood pumps and blood filters into a single housing as suggested by Linker et al (see paragraph 0048) and make

Art Unit: 1723

the device compact having low surface area to reduce priming volume, hemolysis and platelet activation (see paragraph 0010).

9. Claims 12 and 14 (independently) are rejected under 35 U.S.C. 103(a) as being unpatentable over Porro et al as applied to claim 1 above, and further in view of Davidner et al (US 2002/0077581 A1). Porro et al teach a blood treatment device as described in above paragraph 5. Claims 12 and 14 essentially differ from the device of Porro et al in reciting that a drain channel of the filtering means is connected to the first inlet of CO<sub>2</sub> removing means. Davidner et al teach a blood treatment device comprising a blood filter (106) with a drain channel (158) for ultrafiltrate connected to a blood inlet of oxygenator (104) i.e. CO<sub>2</sub> removing means via 109, 111, 161 to provide diluent to blood (see paragraphs 0029-0030, 0034-0035, 0038). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the blood treatment device of Porro et al to connect a drain channel of the filtering means to the first inlet of CO<sub>2</sub> removing means to provide ultrafiltrate as a diluent to blood as suggested by Davidner et al (see paragraph 0029).

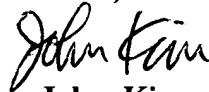
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References in PTO-892 teach various blood treatment devices known in the art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK  
2/9/07